

LARGE FOREST BLOCKS of KENTUCKY

Kentucky State Nature Preserves Commission

Marc Evans, Senior Ecologist - Kentucky State Nature Preserves Commission
Greg Abernathy, GIS Specialist - Kentucky State Nature Preserves Commission
Demetrio P. Zourarakis, PhD, Geoprocessing Specialist - Division of Conservation - Department for Natural Resources

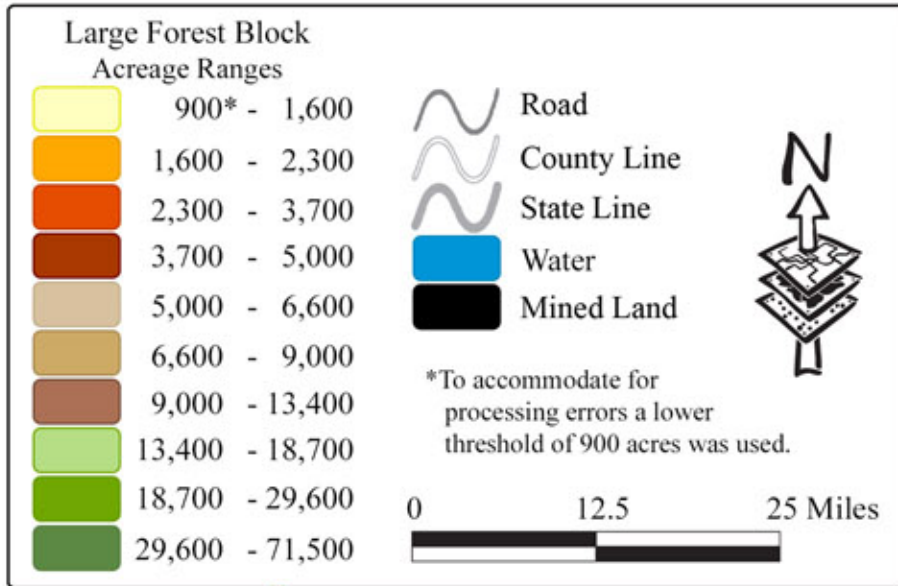
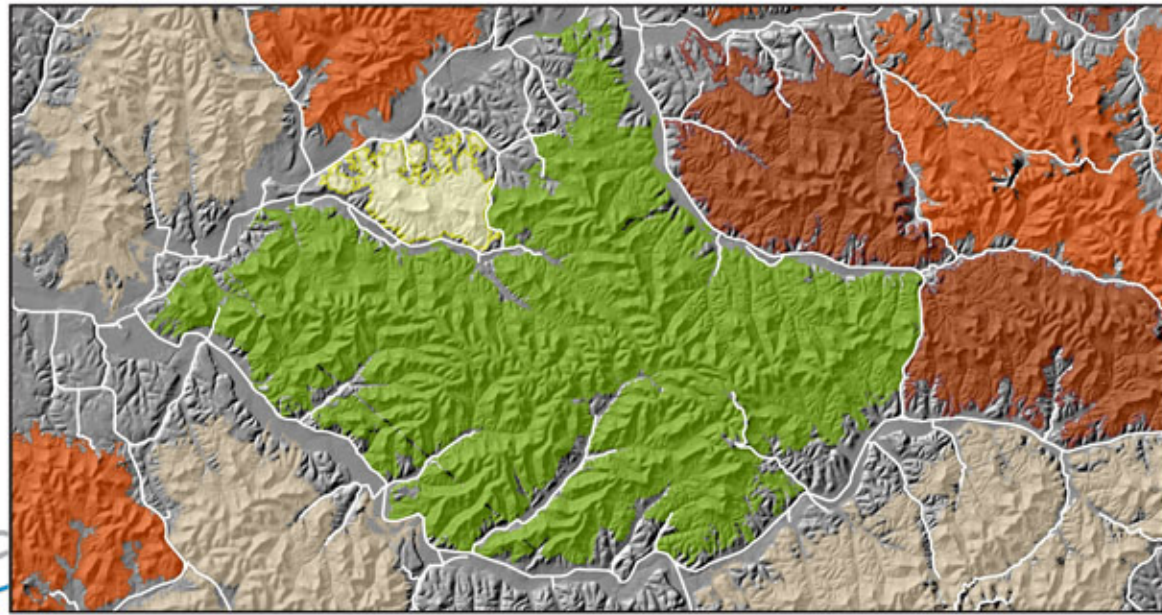
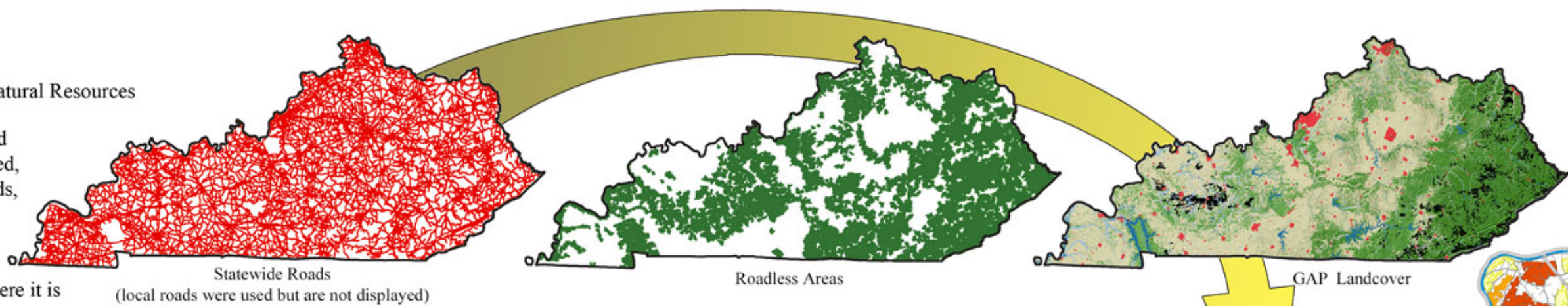
The Kentucky Large Forest Block Project was initiated to address a lack of information on the location and quantity of large tracts of forest remaining in Kentucky. Although nearly 50% of Kentucky remains forested, many of these forests are small woodlots or in small parcels, with larger areas of forest fragmented by roads, power lines, railroads and agricultural fields.

Large forest blocks were identified using geographic information system (GIS) modeling techniques. A minimum accepted size for a forest block was defined as 1,000 acres (5,000 acres in Eastern Kentucky where it is heavily forested). The goal of the first iteration of the project was to determine where large forested roadless areas occur throughout the state. Statewide road data were utilized to identify roadless areas that met the acreage requirements. An overlay analysis was performed using the roadless layer and GAP Analysis Program land cover data to identify large roadless areas that were forested. Over 2,000 blocks of forest were identified, the largest of which was 71,500 acres.

Large tracts of relatively unbroken forest play an important role in conservation. Fragmented forests often lack the ability to perform ecological functions at many levels. Many species of plants and animals require large interior forest areas to successfully reproduce and maintain population levels. In addition, smaller forested areas are heavily influenced by the forest edge, which allows for easier invasion of exotic and weedy plants and animals.

The Kentucky State Nature Preserves Commission is mandated to protect Kentucky's natural heritage by establishing a statewide nature preserve system. Data collected through biological and ecological inventories along with data from other biologists and the literature are entered into the Kentucky Natural Heritage Program (KYNHP) Database. The database is used to monitor species, prioritize conservation efforts and conduct environmental reviews. The large forest block data is now used in conjunction with KYNHP database to assess conservation priorities. Analysis of the various datasets assists in determining where ecologically important areas occur and in designing plans for ecological corridors.

The second iteration of the Large Forest Blocks Project is currently under way. Additional data layers and modeling techniques are being utilized which will result in a finer delineation of the forest blocks. For more information visit www.naturepreserves.ky.gov/inforesources/lfb.htm



Data Sources:
KY GAP Analysis Program Land Cover
KY Dept. of Transportation Road Data



Map Created by:
Greg Abernathy, KSNPC
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